Environmental Pollution **75** (1992) 340–342

CONTENTS OF VOLUME 75

Number 1

Special Issue: Physical and Chemical Processes in Acidic Deposition 1—Trace Gases and Clouds

Editorial 1

AMMONIA

Measurement of the dry deposition flux of NH_3 on to coniferous forest 3
J. H. DUYZER, H. L. M. VERHAGEN, J. H. WESTSTRATE &
F. C. BOSVELD (The Netherlands)
Deposition of atmospheric ammonia to moorlands 15
M. A. SUTTON, J. B. MONCRIEFF & D. FOWLER (UK)
Measurement of dry deposition of ammonia on a forest 25
G. P. WYERS, A. T. VERMEULEN & J. SLANINA (The Netherlands)
Atmospheric deposition and canopy exchange processes in heathland ecosystems . . 29
ROLAND BOBBINK, GERRIT W. HEIL &
MARC B. A. G. RAESSEN (The Netherlands)

PHOTOCHEMICAL OXIDANTS

Ozone in the urban southeastern United States 39
VINEY P. ANEJA, GARY T. YODER & S. PAL ARYA (USA)
Observations of H_2O_2 and PAN in a rural atmosphere 45
G. J. DOLLARD & T. J. DAVIES (UK)
The exchange of nitric oxide, nitrogen dioxide and ozone between pasture and the atmosphere 53
K. J. HARGREAVES, D. FOWLER, R. L. STORETON-WEST (UK) &
J. H. DUYZER (The Netherlands)
Deposition of ozone to a mature spruce forest: measurements and comparison to models . 61
GERHARD ENDERS (FRG)

CLOUD CHEMISTRY AND DEPOSITION

A field study of the generation of nitrate in a hill cap cloud 69
T. W. CHOULARTON, A. J. WICKS, R. M. DOWNER, M. W. GALLAGHER,
S. A. PENKETT, B. J. BANDY, G. J. DOLLARD, B. M. R. JONES, T. D. DAVIES,
M. J. GAY, B. J. TYLER, D. FOWLER, J. N. CAPE & K. J. HARGREAVES (UK)
Seasonal trend of fog water chemical composition in the Po Valley 75
SANDRO FUZZI, MARIA CRISTINA FACCHINI, GIORDANO ORSI &
DONATELLA FERRI (Italy)
Pollution in the upland environment 81
A. CROSSLEY, D. B. WILSON & R. MILNE (UK)
Chemical climatology of high elevation spruce–fir forests in the southern Appalachian mountains 89
VINEY P. ANEJA, WAYNE P. ROBARGE, CANDIS S. CLAIBORN,
ANURADHA MURTHY, D. SOO-KIM, ZHENG LI &
ELLIS B. COWLING (USA)
Measurements and modelling of cloudwater deposition to moorland and forests . . . 97
M. W. GALLAGHER, K. BESWICK, T. W. CHOULARTON, H. COE,
D. FOWLER & K. HARGREAVES (UK)

Environ. Pollut. (**75**) (1992)—© 1991 Elsevier Science Publishers Ltd, England. Printed in Great Britain

Number 2

Special Issue: Physical and Chemical Processes in Acidic Deposition 2—Networks, Models and Mechanisms

Editorial 109

DEPOSITION PROCESSES

Towards an assessment of the influence of climate on wet acidic deposition in Europe . 111
T. D. DAVIES, C. E. PIERCE, H. J. ROBINSON & S. R. DORLING (UK)
Indications for changing deposition patterns in central Europe 121
W. FRICKE & S. BEILKE (FRG)
Hydrogen behaviour and ion concentrations in precipitation of Europe and the United States 129
ELON S. VERRY (USA) & KATRIN NODOP (FRG)
Estimating background precipitation quality from network data 137
B. B. HICKS & R. S. ARTZ (USA)
Preliminary data from the USEPA dry deposition network: 1989. 145
ERIC S. EDGERTON, THOMAS F. LAVERY & RUDOLPH P. BOKSLEITNER (USA)
Fractionation of atmospheric acid and base components within storm events by precipitation scavenging processes 157
HOWARD M. LILJESTRAND (USA)
On the interpretation of event and sub-event rainfall chemistry 163
IAIN J. BEVERLAND & JOHN M. CROWTHER (UK)
Orographic enhancement of snowfall 175
A. J. DORE, T. W. CHOULARTON, D. FOWLER & A. CROSSLEY (UK)
Elemental source signatures of aerosols from the Canadian high Arctic 181
S. LANDSBERGER, V. G. VERMETTE, D. STUENKEL, P. K. HOPKE, M. D. CHENG (USA) & L. A. BARRIE (Canada)
The development of the Acid Deposition and Antioxidant Model (ADOM). 189
A. VENKATRAM, P. KARAMCHANDANI, G. KUNTASAL (USA) P. K. MISRA & D. L. DAVIES (Canada)

THROUGHFALL AND STEMFLOW EXPERIMENTS

Rain and throughfall chemistry in a Norway spruce forest in the Western Prealps . . 199
A. NOVO, A. BUFFONI & M. TITA (Italy)
Fluxes of ions in precipitation, throughfall and stemflow in an urban forest in Kuala Lumpur, Malaysia 209
M. RADZI ABAS, A. AHMAD-SHAH & M. NOR AWANG (Malaysia)
Sulphur and seasalt deposition as reflected by throughfall and runoff chemistry in forested catchments 215
HANS HULTBERG & PERINGE GRENNFELT (Sweden)
Comparison and significance of annual hydrochemical budgets in three small granitic catchments with contrasting vegetation (Mont-Lozere, France) 223
P. DURAND (UK), F. LELONG (France) & C. NEAL (UK)
Contribution of canopy leaching to sulphate deposition in a Scots pine forest . . . 229
J. N. CAPE, L. J. SHEPPARD, D. FOWLER, A. F. HARRISON, J. A. PARKINSON, P. DAO & I. S. PATERSON (UK)
Relation between estimated dry deposition and throughfall in a coniferous forest exposed to controlled levels of SO_2 and NO_2 237
LENNART GRANAT & JAN-ERIK HÄLLGREN (Sweden)
Research on the impact of forest stand structure on atmospheric deposition . . . 243
G. P. J. DRAAIJERS, R. VAN EK & R. MEIJERS (The Netherlands)
Studies on leaching from spruce twigs and beech leaves 251
U. FRITSCHE (FRG)

Number 3

Nutrient leaching from conifer needles in relation to foliar apoplast cation exchange capacity 259
DAVID P. TURNER (USA) & HENDRIK J. VAN BROEKHUIZEN (The Netherlands)
Foliar injury and leaf diffusive resistance of rice and white bean in response to SO_2 and O_3, singly and in combination 265
B. D. TRIPATHI & ANAMIKA TRIPATHI (India)
Inactivation of cadmium in contaminated soils using synthetic zeolites. 269
BARBARA GWOREK (Poland)
Degradation of azo dyes by algae 273
LIU JINQI & LIU HOUTIAN (People's Republic of China)
Arsenic removal from water by chemisorption filters 279
LJUBINKA V. RAJAKOVIĆ & MILAN M. MITROVIĆ (Yugoslavia)
Metal concentrations in seabirds of the New Zealand region 289
J. W. LOCK (New Zealand), D. R. THOMPSON, R. W. FURNESS (UK) & J. A. BARTLE (New Zealand)
Occurrence of carcinogenic amino-α-carbolines in some environmental samples . . . 301
SHIGEO MANABE, OSAMU WADA, MASATOSHI MORITA, SEKIO IZUMIKAWA, KUNIHIKO ASAKUNO & HIRAMITSU SUZUKI (Japan)
Organochlorine contaminants in narwhal (*Monodon monoceros*) from the Canadian Arctic . 307
D. C. G. MUIR, C. A. FORD, N. P. GRIFT, R. E. A. STEWART (Canada) & T. F. BIDLEMAN (USA)
Mercury in flounder (*Platichthys flesus* L.) from estuaries and coastal waters of the north-east Irish Sea. 317
R. T. LEAH, S. J. EVANS & M. S. JOHNSON (UK)
A classification of acidified catchments in Britain 323
KEITH R. BULL & JANE R. HALL (UK)
Altered feeding preference of beech weevil *Rhynchaenus fagi* L. for beech foliage under ambient air pollution 333
E. HILTBRUNNER & W. FLÜCKIGER (Switzerland)
Selected Bibliography 337